

science in junior colleges. The NSF-sponsored commissions are concerned but no one seems to know what to do. Are we recognizing each year outstanding elementary teachers for competency in teaching science, secondary school science teachers, and yes, college science teachers? School superintendents have talked about a state seminar sponsored by someone; perhaps the state academy.

CONSTITUTIONAL MATTERS

President Rusk reiterated the recommendation he made in his report that steps be undertaken to get the Academy incorporated, even if such a step would require certain amendments to our Constitution. One change would be to obtain a permanent address for the Academy; such change is also a requirement for incorporation. Accordingly then, it was moved, seconded, and carried to make the Secretary's address the permanent one for the Academy Corporation. It was also moved and carried that the president seek incorporation and that the President, the President-Elect, the immediate Past-President, the Treasurer, and the Secretary be a committee of five Academy officers to act as incorporators, and have the authority to propose changes in the Constitution that may be required to conform with the laws of incorporation. Such changes will be submitted to the membership along with the annual meeting notice so that they may be voted on the next (1969) annual business meeting.

OTHER BUSINESS

1. President Rusk proposed the formation of a new directorship in the Executive Committee; a Director of Educational Services. Such a new director would coordinate educational services throughout the state. It was moved and carried that the President and the President-Elect be a committee to seek such a new director and report such attempts at the next Executive Committee meeting in January, 1969.

THE SEVENTY-EIGHTH MEETING OF THE TENNESSEE ACADEMY OF SCIENCE

NOVEMBER 22-23, 1968

AUSTIN PEAY STATE UNIVERSITY

The seventy-eighth meeting of the Tennessee Academy of Science was held November 22-23, 1968 at Austin Peay State University, Clarksville, Tennessee. Dean William H. Ellis was Chairman of the Local Arrangements Committee, and Dr. Gustave H. Lundberg, Austin Peay State University, was Program Chairman.

A total of 301 persons registered for the meeting. Of these, 270 were college-university professors and students; 7 were high school teachers and students; and 24 were from ORNL, TVA, medical institutions, state divisions, and private industry.

The General Session was held in the ballroom of the University Center on Friday morning beginning at 10:00 A.M. CST. President Roger Rusk presided, and the welcome was delivered by Dr. Joe Morgan, President of Austin Peay State University. Section meetings were held Friday afternoon; 66 papers were presented.

2. It was moved, seconded, and passed that those named to be Fellows of the Academy be recommended for election by the membership.

3. The Secretary read a letter from Dr. John R. Olive, Executive Director of the American Institute of Biological Sciences dated March 25, 1968, and stating that he and the Governing Board of A.I.B.S. take pleasure in inviting our Academy to affiliate membership in the institute. At that moment the Secretary answered Dr. Olive's letter by stating that the decision to affiliate had to be first passed by the Executive Committee, at the next meeting in November, 1968, and if passed would then be presented to the membership for approval. A Motion was introduced to affiliate, seconded, but it failed to pass. The Secretary was instructed to write an appropriate letter of refusal to affiliate to the Executive Director.

4. President Rusk requested Drs. Raridon, Wishart, Bailey, and Baker to prepare a one-page summary budget request for support of their respective programs in the hope that state money would be available.

5. The Secretary was instructed to prepare letters of nomination for Fellow of the AAAS those members of the Academy who are both Fellows of the Academy and members of the AAAS.

6. President Rusk appointed Dr. Clinton L. Baker to write a history of the Academy.

7. The Secretary read a letter from Dr. H. Malcolm Owen, University of the South, Sewanee, dated November 7, 1968, stating that the Academy is invited to hold its 1970 annual meeting at the University of the South. A Motion was passed to discuss the invitation at the next Executive Committee meeting in January, 1969.

The meeting was adjourned at 2:15 P.M. CST.

The annual business meeting was held in Room 103 of the Claxton Education Building at 5:00 P.M. CST.

The annual dinner was held in the ballroom of the University Center at 7:00 P.M. CST, Friday evening. President Roger Rusk presided, and the address was delivered by Dr. Aaron J. Sharp, Professor of Botany, The University of Tennessee, Knoxville, who spoke on "A Frame of Mind."

The Collegiate Division held its meeting on Saturday morning at 9:00 A.M. CST in Room 102 of the McCord Science Building. Dr. Richard J. Raridon chaired the meeting, and six papers were presented.

ANNUAL BUSINESS MEETING

The annual business meeting of the Tennessee Academy of Science was called to order by President Roger Rusk at 5:05 P.M. CST in Room 103 of the Claxton

Education Building at Austin Peay State University in Clarksville, Tennessee, on November 22, 1968.

The Secretary reported that during 1968, there were 31 new members, 20 drops reported by the Treasurer during the meeting, and no deaths. During the annual meeting, there were 49 new memberships. Academy membership now stands at 823. A Motion was introduced and seconded that all 1968 applications for membership be approved. The Motion carried.

The reports of the Treasurer, the President, the Director of the Collegiate Division, the Director of the Junior Academy, the Director of the Visiting Scientist Program, and the Director of the Reelfoot Biological Station were similar to those presented at the Executive Committee meeting. Again, all reports were approved.

The Chairman of the Auditing Committee did not have a report because a Motion was passed at the last annual meeting to the effect that the Treasurer's books be audited as of December 31, not October 31. The chairman will submit an audit to the Executive Committee in time for their meeting in January, 1969.

The Chairman of the Fellows Committee presented the following members of the Academy as nominees to be named Fellows of the Academy:

1. James D. Caponetti, University of Tennessee, Knoxville.
2. Wendell G. Holladay, Vanderbilt University, Nashville.
3. Lloyd A. King, University of Tennessee, Martin.
4. James M. Moore, University of Tennessee, Martin.
5. Johnny O. Younghanse, Oak Ridge National Laboratories, Oak Ridge.

A Motion was passed that those named be made Fellows of the Academy.

The Chairman of the Membership Committee, Mr. Johnny O. Younghanse, reported that he has mailed out 4,700 membership applications during the last three years, but it is evident from the membership rolls that very few of the applications were utilized. However, he will not give up hope and will continue to send out more application forms.

The Chairman of the Necrology Committee, Mr. James L. Major, reported that no deaths of members occurred during the year.

In the absence of the Chairman of the Research Committee, Dr. Lloyd A. King, President Rusk reminded the members that the Academy receives a small research grant each year from the AAAS for the benefit of high school and college students. Students may apply to the Chairman for small sums to help defray the costs of their research.

The Chairwoman of the Resolutions Committee, Mrs. Gustave H. Lundberg, read the following resolutions which were approved:

"Whereas, the Tennessee Academy of Science, including the Collegiate Division, are enjoying a most pleasant,

profitable, and well-organized series of meetings at Austin Peay State University, and

Whereas, the success of these meetings has resulted from the efforts of the officers and sponsors of these organizations, the chairmen of the respective sections, the Chairman of Local Arrangements, Dean William Ellis, from the recognition given the meeting by the local press, and from the generous hospitality of the host institution.

Be it Resolved, therefore, that the Tennessee Academy of Science express its sincere appreciation to these and all others who have contributed to the success of these meetings.

Whereas, Commissioner J. H. Warf of the Department of Education and Senator Halbert Harvill, have recognized the efforts of the Tennessee Academy of Science and have worked faithfully to secure funds for the Academy,

Be it Resolved, therefore, that the Tennessee Academy of Science express its sincere appreciation to them.

Whereas, Dr. Clinton L. Baker has served faithfully and effectively as Director of the Reelfoot Biological Station for 32 years during which time the Station generated real interest in research in the area, and whereas Dr. Baker is retiring from this position,

Be it Resolved, therefore, that the Tennessee Academy of Science express its sincere appreciation to him for a job well done.

Be it further Resolved, that these resolutions be included in the Minutes of the Tennessee Academy of Science and published as a part of the proceedings of this meeting and that copies be sent to Dr. Joe Morgan, President of Austin Peay State University, Dean William Ellis, Chairman of Local Arrangements, Commissioner J. H. Warf of the Department of Education, Senator Halbert Harvill, and Dr. Clinton Baker, Director of Reelfoot Biological Station.

Respectfully submitted by the Resolutions Committee."

The Chairman of the Nominating Committee, Dr. Norman Campbell, proposed the following nominations for the year 1969:

1. Dr. Gustave H. Lundberg, President.
2. Dr. James L. Wilson, President-Elect.
3. Dr. James D. Caponetti, Secretary.
4. Dr. Robert L. Wilson, Treasurer.
5. Dr. William F. Nelson, Director of Reelfoot Biological Station.

There were no further nominations from the floor, and a Motion was carried instructing the Secretary to cast one vote which would represent the unanimous election of each nominee to his respective office.

OTHER BUSINESS

The Chairman of the Ad Hoc Committee on Evolution, Dr. Albert L. Myers, passed out one copy of the Committee's report to each member present. He then read the report aloud to the members. (The full text of the report is in the Minutes of the Executive Committee Meeting.) A Motion was seconded to approve the report. Dr. Arthur W. Jones, The University of Tennessee, Knoxville, congratulated the Committee on the preparation of an excellent report. The Motion was then carried unanimously.

Dr. H. Malcolm Owen restated his invitation to the Academy to hold its 1969 annual meeting at The University of the South, Sewanee. Action on the invitation was deferred until the next Executive Committee meeting in January, 1969.

The annual business meeting was adjourned by President Rusk at 5:52 P.M. CST.

NEW MEMBERS 1968

- Anderson, Dr. William D., Jr., Dept. of Biology, Univ. of Chattanooga, Chattanooga, Tenn. 37403
 Barnhart, Mr. Robert M., Box 6985, Austin Peay State Univ., Clarksville, Tenn. 37040
 Beach, Mrs. Lois, Natural Science Dept., Lee College, Cleveland, Tenn. 37311
 Bickert, Mr. James H., Dept. of Zoology, Univ. of Tenn., Knoxville, Tenn. 37916
 Bingham, Mr. Ronald R., Char-El Apartments, 30 College Street, Manchester, Tenn. 37355
 Bruce, Mr. Larry A., Dept. of Biology, Univ. of Chattanooga, Chattanooga, Tenn. 37403
 Brunton, Dr. George, 112 Canterbury Road, Oak Ridge, Tenn. 37830
 Bryce, Mr. George W., Jr., Biology Div. Univ. of Tennessee, Martin, Tenn. 38237
 Buckner, Mr. Ewing D., Apt. 5-H, Emerald Hills, Clarksville, Tenn. 37040
 Burch, Miss Barbara K., Box 2349, Tenn. Tech. Univ., Cookeville, Tenn. 38501
 Carroll, Mr. Billy B., 109 Chestnut Lane, Sheffield, Alabama 35660
 Carson, Miss C. Louise, Carson-Newman College, Jefferson City, Tenn. 37760
 Chandler, Sister Marguerite, Notre Dame High School, 2701 Vermont Ave., Chattanooga, Tenn. 37403
 Chandler, Mr. William A., Lambuth College, Jackson, Tenn. 38301
 Cole, Mr. Walter R., Route #1, Box 145, Rockwood, Tenn. 37854
 Corgan, Dr. James X., Dept. of Geology & Geography, Austin Peay State Univ., Clarksville, Tenn. 37040
 Daniel, Mr. Robert S., Jr., 121 Circle Hill Drive, Clarksville, Tenn. 37040
 Daugherty, Mr. James Patrick, 1485 Clayton Street, Cleveland, Tenn. 37311
 Deininger, Dr. Robert W., Dept. of Geology, Memphis State Univ., Memphis, Tenn. 38111
 DeSalvo, Dr. Daniel A., Tenn. Inst. of Electronics, 4711 Old Kingston Pike, Knoxville, Tenn. 37919
 DeVore, Mr. Jon E., 4922 Sarasota Drive, Hixson, Tenn. 37343
 Dishman, Miss Clara A., 118 West Church St., McKenzie, Tenn. 38201
 Eleazer, Mrs. Virginia J., 80 S. Perkins, Memphis, Tenn. 38117
 Ellis, Dr. Eric H., Physics Dept., University of the South, Sewanee, Tenn. 37375
 Etnier, Dr. David A., Dept. of Zoology, Univ. of Tenn., Knoxville, Tenn. 37916
 Farrar, Dr. David T., Dept. of Chemistry, Tenn. Tech. Univ., Cookeville, Tenn. 38501
 Ferguson, Mr. Carl C., 306 Randall Drive, Nashville, Tenn. 37211
 Fleming, Dr. Myrtle M., Science Division, Lee College, Cleveland, Tenn. 37311
 Ford, Dr. Nora L., Box 127A, Tenn. Tech. Univ., Cookeville, Tenn. 38501
 Forrest, Mr. Lee C., Box 6711, Austin Peay State Univ., Clarksville, Tenn. 37040
 Gipson, Mr. John F., Box 153, George Peabody College, Nashville, Tenn. 37203
 Gray, Miss Ramona J., Box 6879, Austin Peay State Univ., Clarksville, Tenn. 37040
 Grinstead, Mr. Bobby G., TVA, E108 Admin. Bldg., Muscle Shoals, Alabama 35660
 Haigh, Dr. Paul J., Physics Dept., Carson-Newman College, Jefferson City, Tenn. 37760
 Hamilton, Miss Reta J., Box 6839, Austin Peay State Univ., Clarksville, Tenn. 37040
 Harris, Dr. John W., Biology Dept., Tenn. Tech. Univ., Cookeville, Tenn. 38501
 Hart, Dr. Francis X., S.P.O. Box 856, Sewanee, Tenn. 37375
 Hasson, Mr. Kenneth, Dept. of Geology, East Tenn. State Univ., Johnson City, Tenn. 37601
 High, Dr. Edward G., Dept. of Biochemistry, Meharry Medical College, Nashville, Tenn. 37208
 James, Dr. Ted R., Biology Department, University of Tennessee, Martin, Tenn. 38237
 Killough, Mr. George G., East Tenn. State Univ., Box 2403, Johnson City, Tenn. 37601
 King, Mr. Benson E., Laughlin Hall, Box 39, Bethel College, McKenzie, Tenn. 38201
 Lee College, Cleveland, Tenn. 37311 (library subscription)
 Lewis, Mr. Donnie C., Route 2, Erin, Tenn. 37061
 Malony, Dr. H. Newton, 708 James St., Athens, Tenn. 37303
 Manning, Mr. Robert A., Tenn. Div. of Geology, G-5 State Office Bldg., Nashville, Tenn. 37219
 Mason, Mr. Bobby, 181 E. Wall St., Algood, Tenn. 38501
 McCorkle, Dr. Kenneth H., Route 3, Brushy Valley Road, Powell, Tenn. 37849
 McGee, Mr. Maurice C., Physics Dept., Memphis State Univ., Memphis, Tenn. 38111
 McReynolds, Miss Mary Lou, Route 1, Gracey, Kentucky 42232
 Miller, Mr. Robert A., 709 Templeton Drive, Nashville, Tenn. 37205
 Moore, Dr. Charles Z., 1619 White Blvd., Murfreesboro, Tenn. 37130
 Murrell, Dr. Leonard R., Dept. of Anatomy, U-T Medical Units, 62 S. Dunlap, Memphis, Tenn. 38103
 Neuman, Dr. Robert E., Bethel College, McKenzie, Tenn. 38201
 O'Bannon, Dr. Robert H., Science Div., Lee College, Cleveland, Tenn. 37311
 Patterson, Mr. Edgar F., Route #2, Charlotte, Tenn. 37036
 Perry, Mrs. Mildred E., Box 6363, Austin Peay State Univ., Clarksville, Tenn. 37040
 Powders, Dr. Vernon N., Georgia Southwestern College, Americus, Georgia 31709
 Prenzel, Miss Dolly J., Mikado Apts. #17, 3831 West End Avenue, Nashville, Tenn. 37205
 Proctor, Dr. Charles D., Meharry Medical College, 1005 18th Ave., N., Nashville, Tenn. 37208

- Rankin, Mr. C. T., Jr., 109 Rand Circle, Oak Ridge, Tenn. 37830
 Richardson, Mr. Larry R., Box 6376, Austin Peay State Univ., Clarksville, Tenn. 37040
 Sears, Dr. Robert F., Dept. of Physics, Austin Peay State Univ., Clarksville, Tenn. 37040
 Settle, Mr. Lloyd R., Apt. 6-D, Emerald Hills, Clarksville, Tenn. 37040
 Sisk, Mr. Morgan E., Dept. Biological Sciences, Murray State Univ., Murray, Kentucky 42071
 Statler, Mr. Anthony T., Tenn. Div. of Geology, G-5 State Office Bldg., Nashville, Tenn. 37219
 Stamper, Dr. Wayne E., 133 Canterbury Road, Clarksville, Tenn. 37040
 Stiles, Mr. Robert A., Dept. of Zoology, Univ. of Tenn., Knoxville, Tenn. 37916
 Strobel, Mr. Eugene F., Biology Dept., Middle Tenn. State Univ., Murfreesboro, Tenn. 37130
 Sykes, Mr. Charles R., 158 Luna Court, Nashville, Tenn. 37211
 Swindell, Dr. Robert T., Route 3, Box 12, Cookeville, Tenn. 38501
 Taylor, Mr. Clovis O., 1106 E. Ford Ave., Muscle Shoals, Alabama 35660
 Taylor, Mr. Landon C., Milligan College, Milligan College, Tenn. 37682
 Thompson, Dr. Clifton C., Dept. of Chemistry, Middle Tenn. State Univ., Murfreesboro, Tenn. 37130
 Trentham, Dr. Jimmy N., Biology Dept., Univ. of Tenn., Martin, Tenn. 38237
 Turner, Mrs. Barbara H., Box 91, George Peabody College, Nashville, Tenn. 37203
 Twigg, Miss Joan C., Route 1, Box 217, Clarksville, Tenn. 37040
 Waer, Mr. Richard D., 2217 White Ave., Apt. #3, Knoxville, Tenn. 37916
 Wallace, Mr. Joe M., Jr., Route 4, Gallatin, Tenn. 37066
 Warren, Mr. Richard P., Dept. of Botany, Univ. of Tenn., Knoxville, Tenn. 37916
 Williams, Miss Peggy Ann, Route #2, Butler, Tenn. 37640
 Wynn, Mr. James S., 1393 W. Broad, Cookeville, Tenn. 38501
 Zurhellen, Mrs. Joan, 100 Enfield Lane, Oak Ridge, Tenn. 37830